

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. - 17. (Canceled)

18. (Currently amended) A method for making sports floor coverings comprising applying a formulation to a surface, said formulation comprising aqueous, isocyanate free polyurethane dispersions, wherein said dispersions have a solid matter content of ≥ 30 percent by weight and a solvent content of ≤ 10 percent by weight and wherein the polyurethane polymers of said dispersions have a number average molecular mass of 25,000 to 100,000 Daltons, and are obtained from polyols and polyisocyanates having an NCO/OH equivalent ratio of 1.5 to 2.5;

wherein said dispersions are produced by a production method comprising the steps of:

a) reacting 10-50 wt% of higher number average molecular weight polyol component (A)(i) having two or more hydroxyl groups reactive with polyisocyanates and a molecular weight ~~mass~~ of 250 to 20,000 Daltons, and optionally ~~0.505~~ 0.50-5 wt% lower number average molecular weight polyol component (A)(ii) having two or

more hydroxy groups reactive with polyisocyanates and having a molecular weight ~~mass~~ of 60 to 250 Daltons with 5-25 wt% of polyisocyanate component (B), consisting of at least one polyisocyanate homolog with two or more aliphatic or aromatic isocyanate groups, optionally in the presence of a catalyst, to create a polyurethane pre-adduct, then

b) reacting the polyurethane pre-adduct of step a) with 0.5-5 wt% of lower number average molecular weight and anionic modifiable polyol component (A)(iii) having two or more hydroxy groups reactive with polyisocyanates and one or more carboxy groups inert with respect to polyisocyanates, which in the presence of base may be completely or partially converted into carboxylate groups, to produce the corresponding prepolymer,

c) reacting the prepolymer of step b) with 0.25-2.5 wt% of a neutralizing component (C) for the complete or partial neutralization of the carboxy groups, followed by or simultaneous with

d) dispersing the neutralized prepolymer of step c) in 10-60 wt% water, which optionally contains 10-70 wt% of formulation component (F) consisting of filler material, pigments, softeners, fiber materials, and other common additives, following which

e) reacting the dispersion of step d) with 0.25-2.5 wt% chain extension component (D) consisting of at least one diamine ~~polyamine~~ with two ~~one or more~~ amino groups reactive with

polyisocyanate, and

f) optionally reacting the dispersion of step e) with 0.05-0.5 wt% of chain stopping component (E) consisting of at least one monoamine with an amino group reactive with polyisocyanate,

wherein the wt% values in steps (a)-(f) are based on the overall weight of said dispersions produced.

19. (Previously presented) A method according to claim 18, wherein said dispersions have a solid matter content ranging from 40 to 70 percent by weight.

20. (Previously presented) A method according to claim 18, wherein said dispersions have a solvent content of less than 5 percent by weight.

21. (Previously presented) A method according to claim 18, wherein said dispersions are solvent free.

22. (Previously presented) A method according to claim 18, wherein the polyurethane polymers of said dispersions form micelles having an average particle size of from 100 to 500 nm.

23. (Cancelled)

24. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion acts as a bonding agent for elastic layers comprising rubber granulates or fibers as well as optionally additives.

25. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion acts as an adhesion promotor, said adhesion promotor being applied to an undersurface of a floor covering.

26. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion acts as a primary coat being applied to an undersurface of a sports floor covering.

27. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion acts as a spray coat, said spray coat being applied to an elastic or stiff undersurface.

28. (Previously presented) A method according to claim 27, wherein said polyurethane dispersion contains a structural filler material.

29. (Previously presented) A method according to claim 27, wherein said polyurethane dispersion contains 0.1 to 1.0 weight

percent of UV stabilizers based on sterically hindered amines relative to the total weight of the formulation.

30. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion acts as a flow coat, said flow coat being applied to an elastic or stiff undersurface.

31. (Previously presented) A method according to claim 28, wherein said polyurethane dispersion contains 0.1 to 1.0 percent by weight of UV stabilizers based on sterically hindered amines relative to the total weight of the formulation.

32. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion is applied as filler material to seal pores of undersurfaces of sports floor coverings.

33. (Previously presented) A method according to claim 18, wherein said polyurethane dispersion is applied as an adhesive to glue prefabricated elastic layers.

34. (Previously presented) A method for sealing sports floor coverings comprising applying a formulation according to claim 18, optionally together with pigments.

35. (Previously presented) A method according to claim 34, wherein said polyurethane dispersion contains 0.1 to 1.0 percent by weight of UV stabilizers based on sterically hindered amines relative to the total weight of the formulation.

36. (Previously presented) A method according to claim 18, wherein said dispersions are applied to elastic or stiff undersurfaces in layers having a total thickness of 0.1 to 50 mm.

37. (Previously presented) A method for applying said polyurethane dispersion according to claim 18 in quantities of 0.1 to 10.0 kg per m² of surface to be covered per work cycle.

38. (Previously presented) A method according to claim 18 wherein the polyurethane dispersion is a one-component formulation.